

What is claimed is:

Claim 1. A cooking apparatus comprising:

a cooking surface;

a sidewall depending from said cooking surface;

a handle having a saddle portion and a gripping portion, said saddle portion having a first opening defined therethrough and a first recess defined about said first opening, said saddle portion being adjacent said sidewall so that said first recess defines a first gap between said sidewall and said saddle portion; and

a first rivet having a first weldament in said first gap, a first shaft in said first opening, and a first head abutting said handle and covering said first opening.

Claim 2. The cooking apparatus as in claim 1, wherein said first weldament fills substantially all of said first gap.

Claim 3. The cooking apparatus as in claim 1, wherein said first opening has a dimension that is about 0% to about 20% larger than said first shaft.

Claim 4. The cooking apparatus as in claim 1, wherein said first rivet has a beveled end opposite said first head.

Claim 5. The cooking apparatus as in claim 1, further comprising a second opening defined through said saddle portion, said second opening being offset from said first opening in a first direction, a second direction, or any combination of said first and second directions.

Claim 6. The cooking apparatus as in claim 5, further comprising:

a second recess defined about said second opening, said saddle portion being adjacent said sidewall so that said second recess defines a second gap between said sidewall and said saddle portion; and

a second rivet having a second weldament in said second gap, a second shaft in said second opening, and a second head abutting said handle and covering said second opening.

Claim 7. The cooking apparatus as in claim 6, wherein said second weldament fills substantially all of said second gap.

Claim 8. The cooking apparatus as in claim 6, wherein said second opening has a dimension that is about 0% to about 20% larger than said second shaft.

Claim 9. The cooking apparatus as in claim 8, wherein said sidewall when viewed from a first plane has a shape selected from the group consisting of circular, polygonal, and any combination thereof.

Claim 10. The cooking apparatus as in claim 8, wherein said sidewall when viewed from a second plane has a shape selected from the group consisting of curved, linear, and any combination thereof.

Claim 11. The cooking apparatus as in claim 1, wherein said sidewall is formed of a first material and said handle is formed of a second material, said first material being more conductive to heat than said second material.

Claim 12. The cooking apparatus as in claim 11, wherein said first rivet is formed of a third material that is weldable to said first material.

Claim 13. The cooking apparatus as in claim 11, wherein said cooking surface is formed of said first material.

Claim 14. A method of forming a cooking apparatus, comprising:  
positioning a handle with respect to a cooking surface wall so that a saddle portion of said handle is adjacent said cooking surface wall, said cooking surface wall being formed of a first material and said handle being formed of a second material dissimilar to said first material;

inserting a first rivet into a first opening defined in said saddle portion so that a first shaft of said first rivet contacts said cooking surface wall, said first rivet being formed of a third material weldable to said first material;

inducing a current through said first rivet and said cooking surface wall so as to weld said first shaft and said cooking surface wall to one another and so that a first portion of said first shaft expands into a first gap defined between said cooking surface wall and said saddle portion at said first opening; and

deforming said first rivet to abut a first head of said first rivet with said saddle portion and to cover said first opening.

Claim 15. The method as in claim 14, wherein inducing said current and deforming said first rivet are substantially simultaneous.

Claim 16. The method as in claim 14, wherein said first material is more conductive to heat than said second material.

Claim 17. The method as in claim 14, wherein said first opening has a dimension that is about 0% to about 20% larger than said first shaft.

Claim 18. The method as in claim 17, wherein said cooking surface wall when viewed from a first plane has a shape selected from the group consisting of circular, polygonal, and any combination thereof.

Claim 19. The cooking apparatus as in claim 17, wherein said cooking surface wall when viewed from a second plane has a shape selected from the group consisting of curved, linear, and any combination thereof.

Claim 20. The method as in claim 14, wherein said first portion fills substantially all of said first gap.

Claim 21. The method as in claim 14, further comprising  
inserting a second rivet into a second opening defined in said saddle portion so that a second shaft of said second rivet contacts said cooking surface wall, said second rivet being formed of said third material;

inducing said current through second rivet and said cooking surface wall so as to weld said second shaft and said cooking surface wall to one another and so that a second portion of said second shaft expands into a second gap defined between said cooking surface wall and said saddle portion at said second opening; and

deforming said second rivet to abut a second head of said second rivet with said saddle portion and to cover said second opening.